

We claim:

1. A transdermal drug delivery device for delivering a pharmaceutically active agent comprising:

- 5           a) a reservoir comprising a releasably stored dosage of the pharmaceutically active agent; and  
              b) a substantially continuous, translucent inorganic barrier layer adjacent to at least a portion of the reservoir.

10          2. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 1, further comprising a backing film substrate.

3. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 2, wherein the backing film substrate is translucent.

15          4. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 2, wherein the inorganic barrier layer directly adjoins the backing film substrate.

20          5. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 1, further comprising a layer comprising a polymer adjoining the inorganic barrier layer.

25          6. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 5, wherein the polymer is crosslinked.

7. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 5, comprising a plurality of inorganic barrier layers.

30          8. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 5, comprising a plurality of layers comprising a polymer.

9. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 5, wherein the polymer is a polyacrylate or polymethacrylate.

10. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 1, wherein the inorganic barrier layer directly adjoins the reservoir.

11. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 1, wherein the inorganic barrier layer is less than about 200 nm thick.

10 12. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 1, wherein the inorganic barrier layer comprises a material selected from the group consisting of indium tin oxide, aluminum oxide, silicon oxide, aluminum-silicon-oxide, aluminum-silicon-nitride, and aluminum-silicon-oxy-nitride.

15 13. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 1, comprising a plurality of inorganic barrier layers.

14. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 1, wherein the reservoir comprises a pressure-sensitive adhesive.

20 15. A transdermal drug delivery device for delivering a pharmaceutically active agent comprising:

a) a reservoir comprising a releasably stored dosage of the pharmaceutically active agent;

b) a flexible, translucent polymeric film backing; and

c) a translucent barrier adjacent to the polymeric film backing,

25 wherein the device is characterized in that the moisture vapor transmission rate across the backing and barrier is less than about 2 g/m<sup>2</sup>/day and the oxygen transmission rate across the backing and barrier is less than about 10 cm<sup>3</sup>/m<sup>2</sup>/day.

30 16. A transdermal drug delivery device for delivering a pharmaceutically active agent according to claim 15, wherein the barrier comprises an inorganic barrier layer.

17. A method of drug delivery to a mammal comprising:
- a) providing a reservoir comprising a pharmaceutically active agent;
  - b) providing a substantially continuous, translucent inorganic barrier layer adjacent to at least a portion of one surface of the reservoir;
  - 5 c) placing the surface of the reservoir opposed to the surface adjacent to the inorganic barrier layer in a delivering relationship to the skin surface of the mammal; and
  - d) allowing the reservoir to remain in a delivering relationship to the skin for a period of time sufficient to provide a therapeutic effect.

10

18. A method of drug delivery according to claim 17, wherein the reservoir directly adjoins the skin.

19. A method of drug delivery to a mammal comprising:

15

- a) providing a transdermal drug delivery device according to claim 15;
- b) placing the device in a delivering relationship to the skin surface of the mammal; and
- c) allowing the device to remain in a delivering relationship to the skin for a period of time sufficient to provide a therapeutic effect.

20

20. A method of drug delivery according to claim 19, wherein the reservoir directly adjoins the skin.